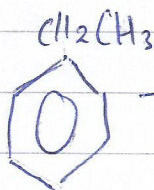


Ar-H



Arene

* Mixed aliphatic aromatic compounds

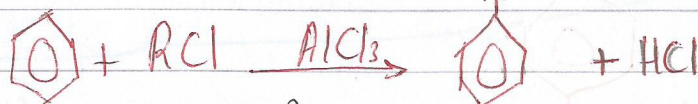


ethyl Benzene

Alkyl benzenes

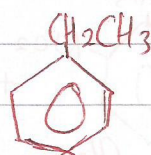
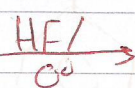
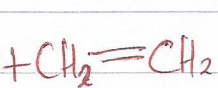
Synthesis

1) F.C alkylation



2)

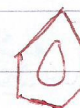
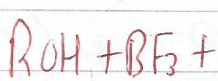
Alkene + HF/O⁺



ethyl benzene

3)

Alcohol + BF₃/60°

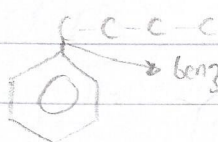


4) Acylation followed by Clemmensen (Zn, Hg, HCl)

Reactions

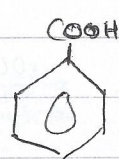


not affected by nitration or sulphonation (o-p)



benzylic C (site of attack)

1) Oxidation

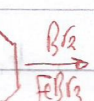
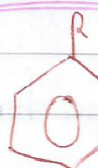


(any alkyl gives benzoic a)

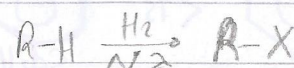
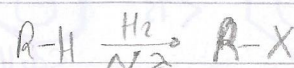


p-Phthalic acid

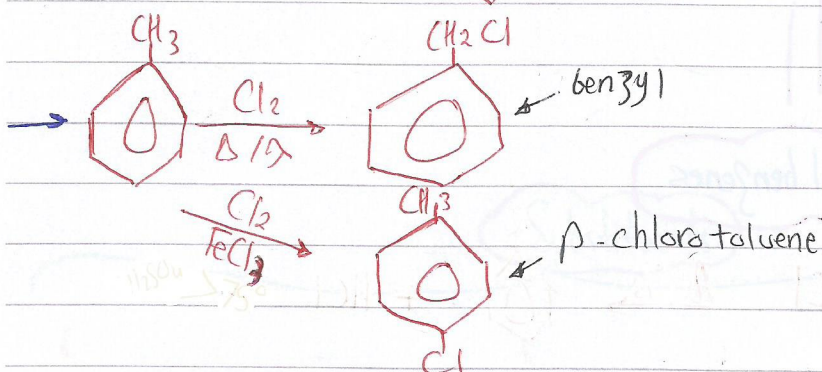
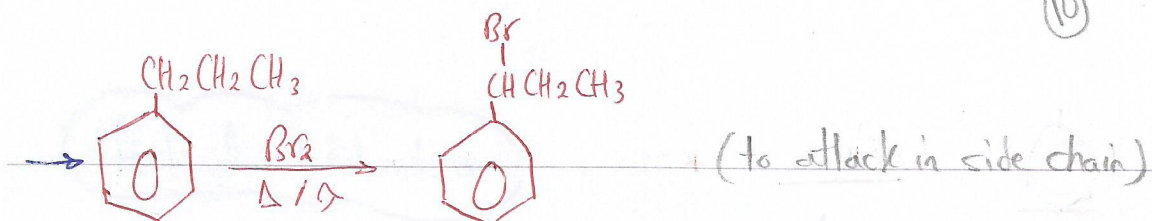
2) Substitution (ring)



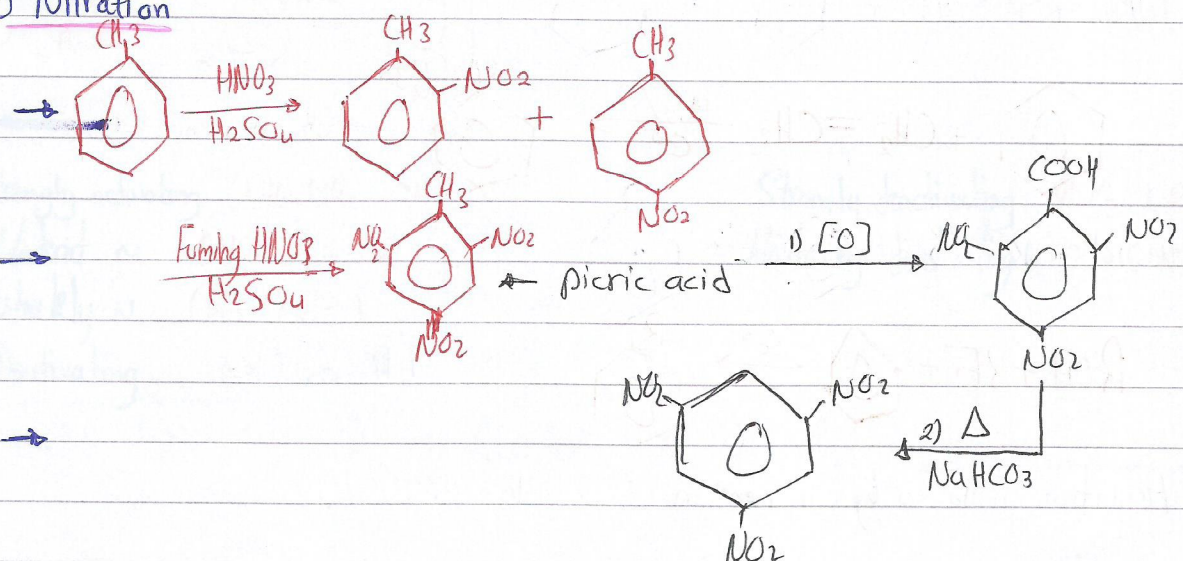
side chain



attack in ring

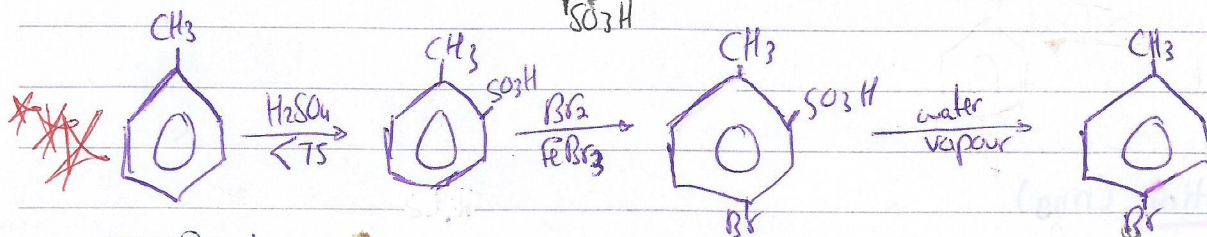
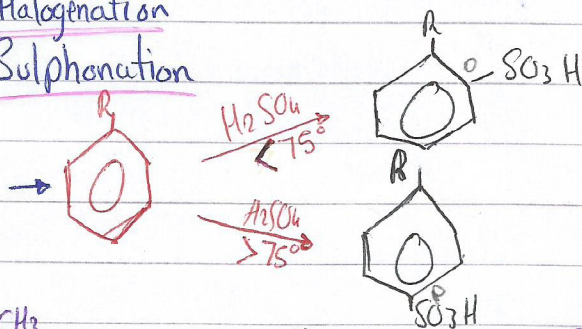


A Nitration



B Halogenation

i Sulphonation



ii Thallation

